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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,417	05/23/2007	Matts Andersson	NOBELB.240NP	4883

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EXAMINER

NELSON, MATTHEW M

ART UNIT	PAPER NUMBER
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3732

NOTIFICATION DATE	DELIVERY MODE
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11/24/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/582,417	Applicant(s) ANDERSSON ET AL.	
	Examiner Matthew M. Nelson	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/9/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.
2. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

Claim Objections

3. Claim 1 is objected to because of the following informalities: Claim 1 recites "wherein the computer. appliance is arranged" which appears to mean "wherein the computer appliance is arranged" and "equipment for production. of the physical" which appears to mean "equipment for production of the physical". Appropriate correction is required.
4. Claim 6 is objected to because of the following informalities: Claim 6 has no transitional phrase such as "comprising" which makes the entire claim part of the preamble. A preamble is generally not accorded any patentable weight. Appropriate correction is required.
5. Claim 13 is objected to because of the following informalities: Claim 13 recites "The arrangement as in claim 6, claimed in any of patent claims 6-12, wherein" which

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appears to mean "The arrangement as in claim 6, wherein". Appropriate correction is required.

6. Claims 1-17 are objected to because of the following informalities: Claims 1-17 recite limitations without "a" or "an" in front, for example "said equipment comprising identification equipment, computer appliance, equipment..." Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-17 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited. Furthermore, in lines 10, 17 of claim 1, there is a period.

9. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

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10. Regarding claims 2, 5, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). With respect to claim 2, it is not clear if the "for example a surgeon" is referring to the first party, a party, or a patient.

11. Claim 1 recites the limitation "stereolithography machine". There is insufficient antecedent basis for this limitation in the claim.

12. Claim 1 recites the limitation "equipment". This is indefinite as it is unclear what this refers to.

13. Claim 15 recites the limitation "accuracy can be 0.1-0.2 mm". This is indefinite as there is no frame of reference for this measurement and what it pertains to. It also appears to be optional due to the word "can".

14. Claim 16 recites the limitation "bite index" in line 3. There is insufficient antecedent basis for this limitation in the claim.

15. Regarding claim 17, the phrase "inter alia" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "inter alia"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claims 6-10, 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Pompa (5,320,529).

18. The following rejection has been made in view of the claims as best understood by the examiner. Pompa shows a template (surgical guide template 16) produced by stereolithography and computer information (col. 1, lines 12-16) for guiding of hole-forming means for forming holes (col. 5, lines 35-38) for implants (24), including through-holes (bore 38) which are provided with sleeves (surgical guide ring 25a) for determining degrees of recessing (col. 5, lines 44-62) and orientation (col. 5, lines 37-43). In regards to the limitation "used for producing a dental bridge structure", this is intended use and does not result in a structural difference between the claimed invention and the prior art. With respect to claims 7-8, sleeves are arranged with first members consisting of outwardly projecting flanges (top of 25b in Fig. 4b) that cooperate with second members consisting of stop surfaces (at 38 in Fig. 5) of the template in the recessed position (at 25a in Fig. 6). With respect to claims 9-10, sleeves are arranged with resilient members (shaft of 25b) whose length determines the degree of recessing in the template and are designed to be able to be snapped into an internal recess (bore 38) when the sleeve is in its final position (at 25a in Fig. 6). A click sound when the sleeve reaches its final position in the template will be emitted from the outwardly projecting flange of the sleeve hitting the stop surface of the template. With respect to claim 12, multiple sleeves are provided for different stages of the drilling process (col. 5, lines 44-62) such as guiding the drill and anchoring members or pins.

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With respect to claim 13, the template is arranged to reproduce the dentine or gum replacement over those parts by extending over the jaw bone (as seen in Fig. 5, 6).

With respect to claim 14, the template is made of plastic material (col. 4, lines 66-68) with a low coefficient of creep. With respect to claim 15, the template is formed on a model of the jawbone giving it a configuration which fixes the position of the template on the actual jaw bone in order to permit hole formations (col. 4, line 60 – col. 5, line 32).

Since the template is made to fit the jaw bone, the accuracy can be within 0.1-0.2 mm.

With respect to claim 16, Pompa discloses constructing the template based on scans of the patients jawbone which inherently include an index of the bite (col. 2, lines 58-63).

The implants would therefore be aligned and in occlusion with an opposing jaw.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pompa in view of Peckitt (6,254,639).

21. The following rejection has been made in view of the claims as best understood by the examiner. Pompa shows a system comprising identification equipment (scanner; col. 2, lines 58-63), computer appliance (computer tomography; col. 2, lines 58-63), equipment (i.e. identification equipment or computer appliance), equipment for

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production of a physical template (guide template is fabricated; col. 2, line 68—col. 3, line 7), and equipment for production of a working model (constructing a stereolithographic model; col. 2, lines 58-63). The computer appliance receives and presents on screen first information (col. 2, lines 12-19) from identification equipment. Second information at the stereolithography machine is used to produce the physical template (col. 2, line 58 – col. 3, line 7) with associated through-bores (bores 38) for sleeves (surgical guide ring 25a). With respect to claim 2, assigning appliances to different parties does not impart any structure or patentable features. With respect to claim 4, Pompa discloses constructing the template based on scans of the patients jawbone which inherently include an index of the bite (col. 2, lines 58-63) from the identification equipment. With respect to claim 5, the equipment for production of a physical template indicates positions for fixing members (holders 32, 33, 34) which extend through the jaw bone structure for retention in the hole formation for implants (as seen in Fig. 6). However, Pompa fails to show an articulator, operating elements on the computer appliance to enter modification information concerning a dental bridge structure, producing a CAD file to be transmitted to a stereolithography machine, equipment for the production of a dental bridge structure, insertion equipment, and equipment of a higher order.

22. Peckitt teaches equipment for the production of a dental bridge structure (stereolithography machine; col. 3, line 8), insertion equipment (bone screws or expansion-type fixings; col. 3, lines 31-35), and operating elements on the computer appliance to enter modification information concerning a dental bridge structure

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(replacement part; col. 3, lines 11-15) and producing a CAD file (digital data; col. 3, line 8) to be transmitted to a stereolithography machine (col. 3, line 8). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to modify Pompa's system to include the production and data elements of Peckitt in order to machine a true scale model and replacement part that may be refined during placement. It would have been further obvious to one having ordinary skill in the art at the time of invention to modify Pompa/Peckitt's system to include an articulator as they are commonly used in the art. In addition, Applicant admits a system of this type is already well known (applicant's specification: page 1, line 27-29). Applicant further admits that equipment of a higher order is known in the art such as the PROCERA® type (applicant's specification: page 2, lines 35-38).

23. Claims 11, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pompa.

24. The following rejection has been made in view of the claims as best understood by the examiner. Pompa discloses the device as previously described above, but fails to show wherein the sleeve can be anchored or locked by means of cement and the part of the template which corresponds to the dentine or gum replacement is designed to reduce the template production time in a stereolithography machine.

25. It would have been an obvious design choice to one having ordinary skill in the art at the time of invention to modify Pompa's template to include cementing the sleeve to the template, as using cement as an anchoring means is well established in the art.

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It would have further been an obvious design choice to one having ordinary skill in the art at the time of invention to modify Pompa's template corresponding to the dentine or gum replacement in order to reduce the template production time in a stereolithography machine.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew M. Nelson whose telephone number is (571) 270-5898. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EDT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MMN/

/Cris L. Rodriguez/

Supervisory Patent Examiner, Art Unit 3732